1,3-diphenylpropene

Other names:	1,3-diphenyl-1-propene
	Benzene, 1,1'-(1-propene-1,3-diyl)bis-
Inchi:	InChI=1S/C15H14/c1-3-8-14(9-4-1)12-7-13-15-10-5-2-6-11-15/h1-12H,13H2
InchiKey:	AIMDYNJRXHEXEL-UHFFFAOYSA-N
Formula:	C15H14
SMILES:	C(=Cc1ccccc1)Cc1ccccc1
Mol. weight [g/mol]:	194.27
CAS:	5209-18-7

Physical Properties

Property code	Value	Unit	Source
gf	380.46	kJ/mol	Joback Method
hf	237.35	kJ/mol	Joback Method
hfus	22.89	kJ/mol	Joback Method
hvap	53.49	kJ/mol	Joback Method
log10ws	-4.33		Crippen Method
logp	3.942		Crippen Method
mcvol	170.390	ml/mol	McGowan Method
pc	2646.11	kPa	Joback Method
rinpol	1651.90		NIST Webbook
tb	586.00 ± 6.00	K	NIST Webbook
tc	845.54	K	Joback Method
tf	285.00 ± 2.00	K	NIST Webbook
vc	0.639	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	401.48	J/mol×K	600.12	Joback Method
cpg	419.21	J/mol×K	641.02	Joback Method
cpg	435.51	J/mol×K	681.93	Joback Method
cpg	450.48	J/mol×K	722.83	Joback Method
cpg	464.25	J/mol×K	763.73	Joback Method
cpg	476.91	J/mol×K	804.64	Joback Method

cpg	488.57	J/mol×K	845.54	Joback Method
dvisc	0.0023544	Pa×s	306.57	Joback Method
dvisc	0.0010656	Pa×s	355.50	Joback Method
dvisc	0.0005843	Pa×s	404.42	Joback Method
dvisc	0.0003647	Pa×s	453.35	Joback Method
dvisc	0.0002496	Pa×s	502.27	Joback Method
dvisc	0.0001827	Pa×s	551.19	Joback Method
dvisc	0.0001407	Pa×s	600.12	Joback Method

Correlations

Information	Value
Property code	pvap
Equation	ln(Pvp) = A + B/(T + C)
Coeff. A	1.35903e+01
Coeff. B	-4.35101e+03
Coeff. C	-1.01042e+02
Temperature range (K), min.	428.12
Temperature range (K), max.	626.60

Sources

Crippen Method: https://www.chemeo.com/doc/models/crippen_log10ws

Joback Method: https://en.wikipedia.org/wiki/Joback_method

McGowan Method: http://link.springer.com/article/10.1007/BF02311772

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C5209187&Units=SI

The Yaws Handbook of Vapor Pressure: https://www.sciencedirect.com/book/9780128029992/the-yaws-handbook-of-vapor-pressure

Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l

Legend

cpg: Ideal gas heat capacity

dvisc: Dynamic viscosity

gf: Standard Gibbs free energy of formation

hf: Enthalpy of formation at standard conditions

hfus:	Enthalpy of fusion at standard conditions
hvap:	Enthalpy of vaporization at standard conditions
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
pc:	Critical Pressure
pvap:	Vapor pressure
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume